

Patent Application Serial No.: 10/643,831
Amendment and Response to Office Action mailed November 29, 2004
Page 7

REMARKS

I. STATUS OF THE CLAIMS

Claims 1-31 are pending in the present application. In the Office Action mailed November 29, 2004, claims 1-31 were rejected.

Claims 1, 8, 22, and 27 are amended hereby. Claims 5 and 24 are canceled. No new matter is presented. Reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 102(e)

Claims 1, 3-5, 7-9, 11, 12, 14, 20, 21, and 27-30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,481,356 to Gualandi ("*Gualandi*"). In view of the amendments to claims 1, 8, 22, and 27, from which the rejected claims depend directly or indirectly, it is respectfully submitted that this rejection is obviated and should be withdrawn.

Gualandi is directed to a body that axially supports a bullet on its end by a coaxial clutch on a column that extends into a seat for contact containment. The cylindrical seat is formed by two half-parts that are separated by longitudinal cuts. During firing, the two half-parts separate and are carried with the bullet, thereby avoiding frictional contact between the bullet and the inside wall of a barrel (col. 1, lines 10-23).

According to the Examiner, "*Gualandi* discloses a sabot...comprising a compression section (15)" (Office Action, page 2). Applicant respectfully disagrees with this assessment. According to *Gualandi*, "[i]n order to provide for resistance to the deflagration crash, the half parts of the containment seat 10 are provided with outside curved parallel reliefs 15 *which permit the separation of the two half parts 10A and 10B*" (col. 4, lines 45-48) (emphasis added). Thus, in contrast to the present invention, *Gualandi* teaches a containment seat that *separates*, not *compresses*, upon firing.

The amended claims more clearly set forth this distinction. In particular, amended claims 1, 8, 22, and 27 and their associated dependent claims recite a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of

Patent Application Serial No.: 10/643,831
Amendment and Response to Office Action mailed November 29, 2004
Page 8

alternating internal and external ridges. In contrast, *Gualandi* merely provides that “[e]ach of the half parts of the containment seat are provided on the *outer surface* thereof with curved reliefs...” (col. 2, lines 34, 35) (emphasis added). There is no teaching or suggestion in *Gualandi* that the curved reliefs permit the containment seat to compress upon firing, as with the alternating internal and external ridges of the present invention, and indeed, *Gualandi* appears to teach away from the use of a compression section by instead providing for the separation of the half parts after firing.

Given that *Gualandi* does not teach or suggest the invention as set forth in amended claims 1, 8, 22, 27, and their associated dependent claims, it is respectfully submitted that *Gualandi* is insufficient to support a rejection under 35 U.S.C. §102(e).

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 2, 6, 10, 13, 15-19, 22-26, and 31 are rejected under 35 U.S.C. §103(a) as being obvious over various combinations of U.S. Patent No. 6,481,356 to *Gualandi*, U.S. Patent No. 4,939,997 to *Hoffman*, U.S. Patent No. 5,263,418 to *Dippold*, U.S. Patent No. 5,361,701 to *Stevens*.

In particular, claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Gualandi*. Claims 2, 19, 22-24 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Gualandi* in view of *Hoffman*. Claims 6, 10, 15, 16, 18 and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Gualandi* in view of *Dippold et al.* Claim 17 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Gualandi* in view of *Stevens*. Claim 25 is rejected under 35 U.S.C. §103(a) as being unpatentable over *Gualandi* in view of *Hoffman*, and in further view of *Dippold et al.*

Gualandi is discussed above. *Gualandi* does not teach or suggest a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of alternating internal and external ridges, as recited in amended claims 1, 8, 22, 27, and their associated dependent claims.

Hoffman is directed to an article of ammunition equipped with a propulsion mechanism or sabot that is configured as a tubular projectile into which a projectile core is

Patent Application Serial No.: 10/643,831
Amendment and Response to Office Action mailed November 29, 2004
Page 9

inserted (col. 2, lines 36-39). *Hoffman* does not teach or suggest a plurality of fins defined by a combination of alternating internal and external ridges, as recited in amended claims 1, 8, 22, 27, and their associated dependent claims.

Dippold is directed to a sabot bullet having a constricted waist. The sabot bullet has a tapered axial recess in the front end having a flat tapered side walls (col. 1, lines 48-52). *Dippold*, however, does not teach or suggest a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of alternating internal and external ridges, as recited in amended claims 1, 8, 22, 27, and their associated dependent claims.

Stevens is directed to a shotgun tracer round for use in a shotgun barrel. *Stevens* does not teach or suggest a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of alternating internal and external ridges, as recited in amended claims 1, 8, 22, 27, and their associated dependent claims.

Given that none of the cited references, alone or in combination, teach or suggest a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of alternating internal and external ridges, as recited in amended claims 1, 8, 22, 27, and their associated dependent claims, it is respectfully submitted that the cited references, and various combinations thereof, are insufficient to support a rejection under 35 U.S.C. §103(a). Thus, it is respectfully requested that this rejection be withdrawn.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. §102(b)

Claims 1, 4, 5, 7, 8, 17, 20 and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Stevens*, discussed above. Amended claims 1 and 8, from which the rejected claims depend directly or indirectly, recite a sabot or firearm round comprising a compression section including a plurality of fins defined by a combination of alternating internal and external ridges. As discussed above, *Stevens* does not teach or suggest such a construction. Thus, it is respectfully submitted that this rejection should be withdrawn.

Patent Application Serial No.: 10/643,831
Amendment and Response to Office Action mailed November 29, 2004
Page 10

CONCLUSION

The foregoing is submitted as a full and complete response to the Office Action mailed November 29, 2004 and is believed to place all claims in the application in condition for allowance. Such action is courteously solicited.

If the Examiner believes that there are any issues that can be resolved by telephone conference, or if there are any informalities that may be addressed by an Examiner's amendment, please contact the undersigned at (404) 879-2437.

Respectfully submitted,



Dana E. Stano
Reg. No. 50,750

Date: February 14, 2005

Womble Carlyle Sandridge & Rice, PLLC
P.O. Box 7037
Atlanta, GA 30357-0037
(404) 879-2437 (Telephone)
(404) 879-2937 (Facsimile)
Docket No.: R087 1270.1 (27584.0274.9)